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Application No.: 09/782,517

Docket No.: 28549-202507



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Michael SCALORA

Application No.: 09/782,517

Confirmation No.: 7518

Filed: February 14, 2001

Art Unit: 2871

For: LIQUID CRYSTAL DISPLAY DEVICE AND
LIGHT EMITTING STRUCTURE WITH
PHOTONIC BANDGAP TRANSPARENT
ELECTRODE STRUCTURES

Examiner: Richard H. Kim

Attorney Docket No.:
28549-202507

INFORMATION DISCLOSURE STATEMENT (IDS)

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

This is an Information Disclosure Statement submitted under 37 C.F.R. § 1.97 within the time specified under 37 C.F.R. § 1.97(c) and with the fee set forth in § 1.17(p).

In order to comply with Applicants' duty of disclosure under 37 C.F.R. § 1.56, the U.S. Patent and Trademark Office is notified of the documents cited on the attached Form PTO-1449. A copy of each is submitted herewith.

Also included are the following items from related international applications: an International Search report mailed January 4, 2001, an International Search Report mailed

April 15, 1999, an European Office Action dated August 23, 2002, an International Search Report mailed September 17, 2001, an International Preliminary Examination Report mailed October 8, 1999, a Written Opinion mailed July 16, 1999, and an International Preliminary Examination Report mailed May 7, 2002.

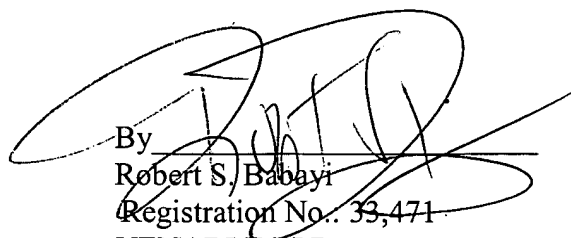
In view of the above, all requirements of 37 C.F.R. § 1.97 and all official guide lines pertaining to Information Disclosure Statements have been complied with, and it is therefore respectfully requested that the Examiner consider the documents and make them of record.

The present Information Disclosure Statement is being filed after the Office Action on its merits. Therefore, it is believed that a fee of \$180.00 under 37 C.F.R. § 1.17(p) is required for the submission of this Information Disclosure Statement.

Please charge any deficiency or credit any overpayment in connection with this Information Disclosure Statement to Deposit Account No. 22-0261.

Respectfully submitted,

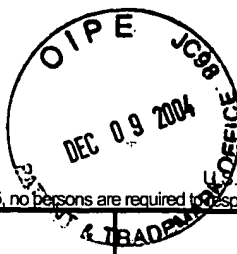
Dated: 12/09/04


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Approved for use through 10/31/2002. OMB 0651-0031

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known

Sheet 1 of 1

Application Number	09/782,517
Filing Date	February 14, 2001
First Named Inventor	Michael SCALORA
Group Art Unit	2871
Examiner Name	Richard H. Kim
Attorney Docket Number	28549-202507

U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
	1	5,703,436		Forrest et al.	12/30/1997	
	2	5,760,423		Kamakura et al.	06/02/1998	
	3	6,014,196		Anzaki et al.	01/11/2000	
	4	6,304,366	B1	Scalora et al.	10/2001	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ₆
		Office ³	Number ⁴	Kind Code ⁵ (if known)				
	5	WO	99/15922	A2	Scalora	04/01/1999		

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	6	Felbacq, "Wave Propagation in one-dimensional photonic crystals", Optics Communication 152 (1998) pages 119-126.	
	7	Blomer et al., "Transparent metal electrodes: The photonic band gap approach", Part of SPIE Conference on Organic Light-Emitting Materials and Devices, II, San Diego, CA July 1998, pages 217-224.	
	8	Scalora et al., "Transparent, metallo-dielectric, one-dimensional, photonic band-gap structures", Journal of Applied Physics, Vol. 83, number 5, March 1, 1998, pages 2377-2383.	
	9	Contopanagos et al., "Electromagnetic properties of periodic multilayers of ultrathin metallic films from dc to ultraviolet frequencies", J. Opt. Soc. Am A/Vol. 16, No. 9, September 1999, pages 2294-2306.	
	10	Bennink et al., "Accessing the optical nonlinearity of metals with metal-dielectric photonic bandgap structures", Optics Letters, Vol. 24, No. 20, October 15, 1999, pages 1416-1418.	
	11	Yablonovitch, "Inhibited Spontaneous Emission in Solid-State Physics and Electronics", Physical Review Letters, Volume 58, Number 20, May 18, 1987, pages 2059-2062.	

Examiner
Signature

Date
Considered

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

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